

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of)	
)	
Revision of the Commission's Rules)	CC Docket No. 94-102
To Ensure Compatibility with)	
Enhanced 911 Emergency Calling Systems)	
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**SPRINT PCS FURTHER SUPPLEMENTAL
PHASE II IMPLEMENTATION REPORT**

Sprint Spectrum L.P., d/b/a Sprint PCS ("Sprint PCS"), submits this Further Supplemental Report to provide the Commission with continuing, up-to-date information on key implementation issues associated with Sprint PCS' E911 Phase II deployment.¹ This Report provides additional details regarding the progress of Sprint PCS' switch vendors in creating software capable of delivering Phase II information and provides information regarding the status of current testing of GPS equipment in Rhode Island. Sprint PCS also includes a specific timeline for its pending waiver request and outlines what can and cannot be accomplished within that timeline, to assist the Commission in its consideration of possible waiver terms and conditions.

First, Sprint PCS is pleased to report that Nortel has now delivered its switch software, MTX 10, to the Sprint PCS test labs. Sprint PCS and additional vendor testing has now commenced. It is hoped that this delivery will permit Sprint PCS to maintain its

¹ See also Sprint PCS Joint Phase II Implementation Report, Docket 94-102 (Nov. 9, 2000); Sprint PCS Supplemental Phase II Implementation Report and Request for Temporary and Limited Waiver, Docket 94-102 (July 30, 2001); Sprint PCS Reply Comments and Further Supplemental Report, Docket No. 94-102, (Sept. 4, 2001).

current schedule for Phase II network readiness in Nortel markets, whereby installation of this new Nortel software will be completed by August 1, 2002.²

Second, Sprint PCS must now report that Lucent has indicated that it will *not* certify its Phase II software for use to end-user subscribers until November 9, 2001. This delay by Lucent will cause Sprint PCS' Lucent installation schedule to slip by at least two months.³

Third, Sprint PCS reports that its initial testing in Rhode Island is continuing and that these preliminary tests have been successful, to date. However, based on Lucent's inability to certify its Phase II software until November 9, 2001, commercial deployment of Phase II service in Rhode Island must be delayed until after this date.

Finally, Sprint PCS includes herein an updated timeline for its waiver request, based on vendor status and deployment requirements for Phase II service.

I. NETWORK SWITCH SOFTWARE STATUS

As described in its previous filings, Sprint PCS has two primary switch vendors, Lucent and Nortel. One of the many steps towards achieving Phase II readiness involves carrier upgrades and changes to its network, including upgrading the switch software to be capable of collecting and passing information from the new GPS enabled handsets to the Mobile Positioning Center ("MPC") and the Position Determining Equipment ("PDE"). This Further Supplemental Report provides information on the status of Sprint PCS' vendors' software development, and updates the Company's network installation estimates.

² See *id.*

³ See Lucent Technologies Letter to Susan Norris dated September 18, 2001 (Attachment A).

A. Nortel. As indicated in Sprint PCS' Limited Waiver request, Nortel's delay in delivering the software necessary for deployment of Phase II has been a major obstacle to meeting the Phase II deadlines. Nortel has, however, now made its initial release of MTX 10, the software designed to provide the necessary network support for Sprint PCS' GPS-enabled phones. That software is now in the Sprint PCS lab for its initial round of testing. There is still extensive work to be done before such software can be considered ready for network deployment, but receipt of the software means that Sprint PCS should be able to meet its estimated network installation schedule of August 1, 2002, as contained in its September 4, 2001 filing. If testing goes well, Sprint PCS may be able to deploy earlier. To confirm, this date represents Phase II network capability for Sprint markets served by Nortel switches, *not* the date provision of commercial service will necessarily be commenced.

B. Lucent. At Sprint PCS' request, Lucent created a patch for its switch software that would support the delivery of Phase II data from the newly enabled GPS handsets to the MPC and PDE. This patch was designed for the software then running on the Sprint PCS network. Using this patch, Sprint PCS has recently begun testing of its GPS location systems in Rhode Island. Unfortunately, Lucent has indicated that this early release may contain programming problems and, accordingly, Lucent will not certify the software for use with live end-user customers.⁴

Lucent has subsequently released a new software load for its switches. This subsequent software is now being tested in Sprint PCS labs and by Lucent and contains a more mature version of the Phase II E911 software currently being used in Rhode Island.

⁴ *Id.*

Again, Lucent has not yet completed its testing of this version of its E911 software and will not release the software for use with live end-user customers. According to Lucent, Sprint PCS will not be able to begin commercially deploying E911 Phase II functionality in Lucent switch markets until *November 9, 2001*.⁵

Sprint PCS' initial projection for completion of Phase II deployment in Lucent markets was based upon an assumption that Lucent Software would be ready for general deployment by October 1, 2001. Based upon this delay by Lucent, Sprint PCS now estimates it will be required to delay this installation schedule by at least two months. Therefore, Sprint PCS does not anticipate completion of network readiness in Lucent markets until *May 30, 2002*, and all dates contained in Appendix A to Sprint PCS' waiver request will likewise be delayed by two months. Again, Sprint PCS will update the record on the status of network activities, as developments occur.

II. RHODE ISLAND TESTING

Sprint PCS has begun testing of GPS-enabled phones on its network in Rhode Island and has successfully performed location calculation on hundreds of calls. Accuracy for the GPS system appears to meet or exceed the FCC guidelines. Transmission of data to the Rhode Island PSAP is scheduled to begin by September 24, 2001. Transmission will be limited to test calls, however, due to Lucent's inability to certify the current software patch for general use.

Sprint PCS cannot risk placing live 911 calls on a system that its vendor will not certify. In turn, commercial deployment in Rhode Island must be delayed until Lucent is able to certify its software for general deployment. Lucent does not anticipate issuing

⁵ *See id.*

such a release until November 9, 2001, and live deployment to end users in Rhode Island will necessarily be delayed until after that date. While Sprint PCS had intended to provide commercial service in Rhode Island on October 1, 2001, it now plans commercial deployment soon after November 9, 2001, if the Lucent software is certified for commercial use.

III. SPRINT PCS' PROPOSED TIMELINE FOR PHASE II IMPLEMENTATION

Sprint PCS' Waiver Request outlined three areas in which a waiver would be required: 1) network readiness, 2) handset penetration rates, and 3) the six-month implementation window.⁶ The grounds for seeking waivers on these specific issues have been discussed at length in Sprint PCS' previous filings, and are incorporated herein by reference. In this filing, Sprint PCS sets out an updated specific timeline addressing these issues and deployment activities.

A. Network Readiness. FCC Rule 47.20.18(g) requires that within six months of a PSAP request, a CMRS carrier must "install any hardware and/or software in the CMRS network and/or other fixed infrastructure, as needed, to enable the provision of Phase II enhanced 911 service."⁷ Sprint PCS proposes to complete all necessary hardware and software installation required within its own network to provide Phase II services, *regardless of whether or not a PSAP has made a request*, by May 30, 2002 in Lucent markets and by August 1, 2002 in Nortel markets.

⁶ See Sprint PCS Supplemental Phase II Implementation Report and Request for Limited and Temporary Waiver, filed July 30, 2001.

⁷ 47 C.F.R. § 20.19(g)(2)(A).

By stating that it will complete all necessary hardware and software installation required within its own network, Sprint PCS is representing that it will purchase and install the necessary MPC and PDE national platforms (these platforms are already in place); install and test the operating software for the MPC and PDE platforms; install the necessary connectivity between its MPC and PDE platforms with its switches and signal control points; install the operating software in its switches and basestations as required to operate the system; begin selling GPS-enabled phones; and otherwise complete all necessary infrastructure work required within the Sprint PCS network to support Phase II services.

Sprint PCS is *not* committing, however, that it will have in place by these dates those elements required for Phase II deployment which are *outside* its network and direct control. As the Commission is well aware, delivery of Phase II services requires not only modification of the CMRS carrier's network, but also modifications and connections to the landline E911 network. Before services can be turned up for a specific PSAP, appropriate trunking must be installed by the E911 service provider; data must be collected from the PSAP and populated in the appropriate databases; routing decisions must be agreed upon; and the ALI database must be upgraded to collect Phase II data from the CMRS carrier. These aspects of deployment are not within the control of Sprint PCS and they necessarily vary from PSAP to PSAP; accordingly, a specific date for completion of these activities cannot be given.

B. Handset Penetration. Sprint PCS has committed to meet the deadline of October 1, 2001 to begin selling GPS-enabled phones. Likewise, as of December 31, 2002, Sprint PCS will purchase only GPS-enabled phones for sale to the public. It has thus committed to meeting the date for sale of 100% ALI handsets. For the interim period,

Sprint PCS hopes to achieve a 10% activation rate by December 31, 2001, and further hopes to achieve a 30% activation rate by June 30, 2002. As noted in its previous filings, however, Sprint PCS cannot control consumer choice and the actual interim activation levels may vary. The recent economic downturn makes especially difficult the prediction of further consumer purchasing decisions.

Moreover, Sprint PCS does not believe it should be placed at a competitive disadvantage with respect to other carriers. GPS-enabled handsets are more expensive to produce and require additional subsidies to be marketable. Sprint PCS has found it necessary to subsidize its first ALI handset at a greater amount, to ensure competitive pricing of the handset for public acceptance. If other carriers are granted additional time to meet the handset activation dates, such an extension should be granted to Sprint PCS as well. Competitive neutrality demands no less.

C. Six-Month Implementation Deadline. FCC Rule 20.18(g) further requires a carrier “to begin delivering Phase II enhanced 911 service” within six months of a PSAP request.⁸ As outlined in its previous filings, this six-month implementation window is unworkable where large numbers of PSAPs make simultaneous requests. In the case of Sprint PCS, it would require “flash cut,” simultaneous national service on October 1, 2001. Despite Sprint PCS’ significant efforts, commitments and expenditures, such deployment is a physical impossibility. Moreover, and more importantly, the actual delivery of Phase II service is dependent upon several factors outside the control of the wireless carrier.

⁸ 47 C.F.R. § 20.19(g)(2)(B).

Accordingly, Sprint PCS requests that this six month deadline not be triggered until the following conditions have been met:

- 1) The necessary Sprint PCS network infrastructure is in place under the timetable outlined above (*i.e.*, the six month window for any request would not open until May 30, 2002 for Lucent markets and August 1, 2002 for Nortel markets).
- 2) The requesting PSAP has completed installation of Phase I services using a delivery system compatible with Phase II. To date, the only systems that appear to be compatible with Phase II are NCAS systems.
- 3) The ALI database provider has installed an interface compatible with Phase II services. Specifically, the ALI database must be able to perform a pull function over the NCAS system to retrieve latitude and longitude. Otherwise, Phase II location information will not be available to PSAPs, notwithstanding carrier compliance with Phase II requirements.

Sprint PCS emphasizes that the failure to trigger the six month deadline in a particular instance will *not* mean that work toward Phase II implementation and actual service provision ceases. Sprint PCS commits that it will continue to work cooperatively with Public Safety to achieve a mutually agreeable deployment schedule. Further, Phase I obligations will not be effected by this waiver request. This proposed tolling of the six month deadline merely addresses logistical issues associated with Phase II deployment, for Sprint PCS and other affected parties. Once the conditions outlined above are met, Sprint PCS hopes the implementation of Phase II services can occur on a relatively expedited basis.

IV. CONCLUSION

Sprint PCS continues its efforts to deploy Phase II services throughout its nationwide network. Sprint PCS fully recognizes the importance of this effort and pledges to continue to keep the Commission informed regarding its efforts and the progress of its vendors. For the reasons stated in its filings, Sprint PCS seeks a waiver of the Phase II requirements as set forth herein.

Respectfully submitted,

SPRINT SPECTRUM L.P., d/b/a Sprint PCS

A handwritten signature in black ink, appearing to read 'L. Lancetti', written over a horizontal line.

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September 20, 2001

VIA FACSIMILE

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September 18, 2001

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Re: CDMA E911 Phase II Solution

Dear Susan:

In response to your request for additional information, Lucent provides the following details regarding support of E911 Phase II.

Typically, before Sprint PCS deploys generally available software, you conduct extensive laboratory and field tests. However, due to our mutual desire to facilitate the rapid deployment of E911 Phase II solutions, Lucent made available to Sprint PCS an early version of our CDMA solution. This software contained a portion of Lucent's Phase II solution and allowed Sprint to begin initial lab testing in February 2001.

In early September 2001, Lucent made available to Sprint a more mature version of the CDMA E911 Phase II software. This version is currently being lab tested by Sprint. As of this writing, Lucent's targeted ready for deployment date for our CDMA E911 Phase II solution is November 9, 2001. Once our CDMA solution is generally available, Sprint PCS may begin commercially deploying E911 Phase II functionality in markets served by Lucent infrastructure equipment.

In conclusion, Lucent would like to reiterate that our engineers are diligently developing and testing our CDMA E911 Phase II solution and that we will make our solution generally available as quickly as possible.

Sincerely,


Dave Timpe

CERTIFICATE OF SERVICE

I, Jo-Ann G. Monroe, do hereby certify that on this 20th day of September 2001, copies of the foregoing "Sprint PCS Further Supplemental Phase II Implementation Report" were served by U.S. first-class mail, postage prepaid, to the following:

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